

*Amendments to the Claims*

1-12. (canceled)

13. (currently amended) A method of transmission in a contention-based access channel by a wireless transceiver, comprising:

a) transmitting a burst in said channel;

b) detecting whether said burst has collided with another burst in said channel;

and, [[if]] when a collision is detected at said detecting step, waiting for a period determined according to a repeat parameter before repeating steps a) and b), wherein said repeat parameter is received by said transceiver and wherein said repeat parameter indicates a ~~range~~ waiting period and includes an increment by which said ~~range~~ waiting period is increased after each ~~repetition of steps a) and b)~~ subsequent collision is detected, whereby said transmission in step a) is increasingly delayed as additional collisions are detected.

14. (original) A method as claimed in claim 13, wherein said period is randomly or pseudo-randomly selected from a range indicated by said repeat parameter.

15-17. (canceled)

18. (previously presented) A method as claimed in claim 26, including detecting the content of said monitored data, wherein the demand for capacity is predicted according to said content.

19. (currently amended) A method of allocating frequency channels to a plurality of wireless transceivers, comprising:

transmitting to each of said plurality of transceivers a forward frequency channel allocation signal indicating an allocation of ~~one or more~~ a forward frequency channel ~~channels~~ which that transceiver is to receive, wherein each transceiver in said plurality of transceivers is allocated a different forward frequency channel; and

transmitting to each of said plurality of transceivers, in ~~at least one~~ said forward frequency channel ~~channels~~ assigned to that transceiver, a respective return channel allocation signal indicating an allocation of one or more return frequency channels in which that transceiver may transmit;

wherein, for each forward frequency channel, a set of preferred return frequency channels is stored, such that for ~~each of said transceiver~~ transceivers to which a specified one of said forward frequency channel ~~channels~~ is allocated, the allocated one or more return frequency channels is preferentially selected from said corresponding set of preferred return frequency channels.

20. (withdrawn) A method of allocating contention-based capacity to a plurality of wireless transceivers, comprising:

transmitting to said transceivers a first contention-based capacity allocation signal indicating a first channel capacity assigned for contention-based access to said transceivers;

receiving in said first channel capacity, transmissions from said transceivers;

detecting a level of usage by said transmissions of said first channel capacity;

determining, according to said level and said first channel capacity, a second channel capacity assigned for contention-based access to said transceivers; and

transmitting a second contention-based capacity allocation signal, indicating said second channel capacity, to said transceivers.

21-25. (canceled)

26. (currently amended) A method of controlling transmission by a wireless first transceiver in a channel shared with transmission by other transceivers, comprising:

monitoring data packets transmitted to said first transceiver;

~~detecting~~ analyzing the content of the payload of said monitored data packets;

predicting, on the basis of said analyzing ~~monitoring step~~ ~~according to said content~~, a future demand for capacity in said channel by said first transceiver ; [[,]] and

transmitting to said first transceiver an allocation signal indicating an allocation in said channel determined according to said predicted demand, wherein said allocation is made independently from a request for allocation by said first transceiver.

27. (original) A method as claimed in claim 26, including generating a statistical model based on previous traffic flow to and from wireless transceivers, wherein the demand for capacity is predicted according to said statistical model.